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American Petroleum Institute
1220 L Street, Northwest
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Monthly Statistical Report

Prepared by the Finance, Accounting, and Statistics Department

Vol. 16, No. 6

JULY 15, 1992

JUNE 1992

SUMMARY

In the first half of 1992—for the first time in three years for a similar six-month period—petroleum deliveries showed a measurable increase. The 1.6 percent, 260 thousand B/D rise versus a year ago, however, represented more of a partial recovery from even lower levels a year ago than out-of-the-ordinary strength this year. Even then, the first half increase was less than many analysts had earlier expected, and many have revised downwards their outlook for the remainder of the year.

While the economy has been inching ahead over the past year or so, it has not really recovered much more than the ground lost earlier—reaching a level perhaps only about half a percent higher than two years ago. But petroleum deliveries have not even done this well, and for the first half were still down 1.8 percent compared with two years ago and 3.5 percent from three years ago. That petroleum deliveries grew less than the economy is hardly unique, but rather continues a long-term pattern. In fact, in nine out of the ten past years, petroleum demand growth has lagged behind that of the economy.

The biggest gain for the first half was for distillate fuel oil deliveries, which rose 3.6 percent due to increases in transportation usage. Gasoline deliveries rose 1.4 percent, though by the end of the period gains had turned into declines. Kerosine jet fuel deliveries, dropping 1.3 percent for the first half, nevertheless managed a 3.2 percent gain for the second quarter. Residual fuel oil deliveries continued their shrinkage of the past several years, dropping 3.5 percent.

On a shorter-term basis, June's total deliveries were unusually low for most products compared with recent trends. Total deliveries were off 2.4 percent and dragged the quarter as a whole down to only an 0.7 percent rise. It is true that year-to-year gains would have been expected to diminish in the past month or two because of comparison against year-ago deliveries which were strengthening from lower levels early in 1991 (see graph on following page). But recent trends still would have suggested a slight year-to-year gain, rather than a decline, for June.

Despite nearly flat imports in the first half versus a year ago, due in part to differences in the behavior of inventories and exports, declines in domestic crude oil production imply continued growth in the underlying trend of petroleum imports. The first half's drop in domestic crude oil production of 3.3 percent or 250 thousand B/D from a year ago put domestic output at 7.24 million B/D—the lowest half-year level in more than 30 years. The lower 48 contributed two-thirds of the drop, but Alaskan output dropped as well, with output from other fields insufficient to compensate for declining production from Prudhoe Bay, the country's largest.

Although refinery activity was relatively strong during more recent months, input to distillation units for the first six months as a whole averaged only 0.4 percent higher than a year ago. By June, however, utilization of capacity in actual operation had reached roughly 96 percent, among the highest observed rates of the past ten years.

Conservatism in inventory-holding continued to be apparent in June, particularly for crude oil. Total inventories, though rising about 45 million barrels over the second quarter, still ended the period 20 million barrels below a year ago and 10 million barrels below average for the end of June. Crude stocks fell 17 million barrels to 328 million barrels, about 20 million barrels less than average for June. Gasoline stocks, though, ended the month 8 million barrels ahead of last year and distillate stocks, though 10 million barrels down from a year ago, were only moderately below average for June.

PRODUCT SUPPLIED[1]

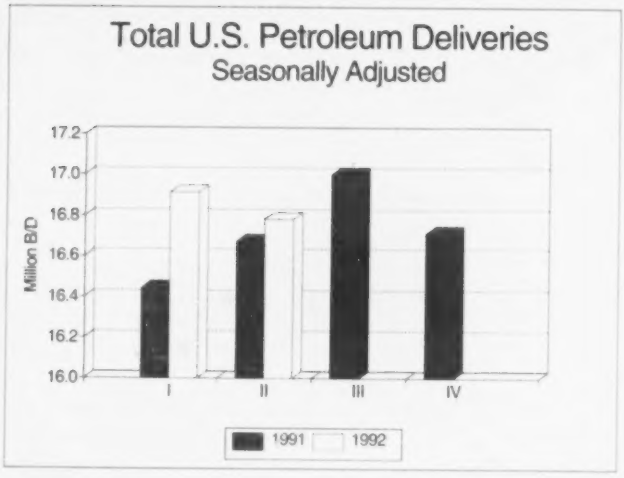
Gasoline

RECENT WEAKNESS MASKED BY FIRST HALF'S GROWTH.

After three years of flat-to-declining performance, gasoline deliveries in 1992's first half showed an increase—though of only 1.4 percent. The increase was barely enough to bring deliveries back to their level of two years ago for the same period. Furthermore, the year-to-year increase weakened to only 0.2 percent in the second quarter, in part because of June's marginal decline and in part because of comparison against improving deliveries a year ago. Underlying growth in demand is estimated to be modest.

The pattern for deliveries reflected that of highway traffic, whose growth has picked up in the first six months of this year compared with weaker growth in the past year or two. The first

	API ESTIMATES JUNE		YEAR-TO-DATE	
	Million B/D	Percent Change	Million B/D	Percent Change
Total domestic deliveries	16.5	(2.4)	16.7	1.6
Crude production[p]	7.2	(2.3)	7.2	(3.3)
Total imports[p]	7.6	(7.5)	7.5	0.4
Stocks (million bbl)[p]	1,046	(1.8)	na	na



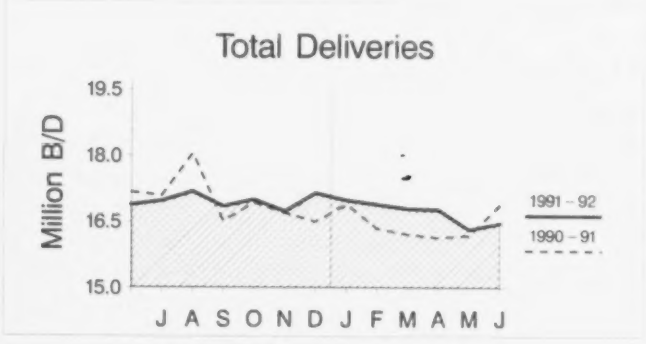
half's growth in travel still fell short, however, of that of the latter half of the 1980s, when it had been growing at about 4 percent per year. This had slowed to 2.4 percent in 1990 and 1 percent last year. With continued improvement in the fuel efficiency of the fleet, that had not been enough to keep gasoline demand growing, and as a result, gasoline deliveries, which had been rising an average of 1.8 percent per year, leveled off in 1990 and fell in 1991. Travel in this year's first half is estimated to have risen by about 3.5 percent, perhaps partly due to unusually mild winter weather, and the second quarter's growth rate, along with that of gasoline demand, we estimate eroded from the first quarter's level.

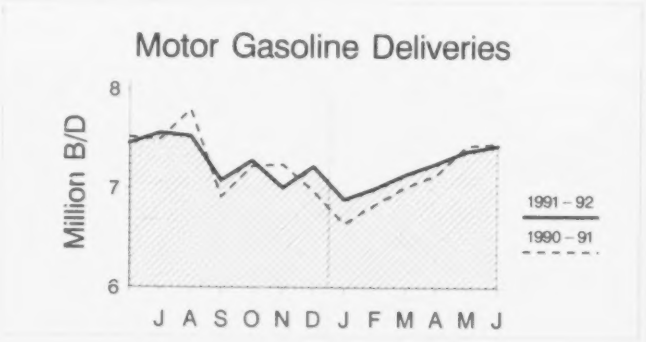
Retail prices rose another 5 cents per gallon, on average, in June versus May. This brought the increase since March to about 12 cents—coinciding with increases in crude oil costs, seasonal demand, and tighter environmental requirements for summer gasoline than in the past. Versus a year ago, prices averaged about 1 cent higher. For the sake of historical comparison, retail prices for unleaded regular, if put in today's dollars, have ranged from about $1.05 to $2.25 over the past twelve years on an inflation-adjusted basis. June's estimated average of $1.17 falls towards the lower end of that range.

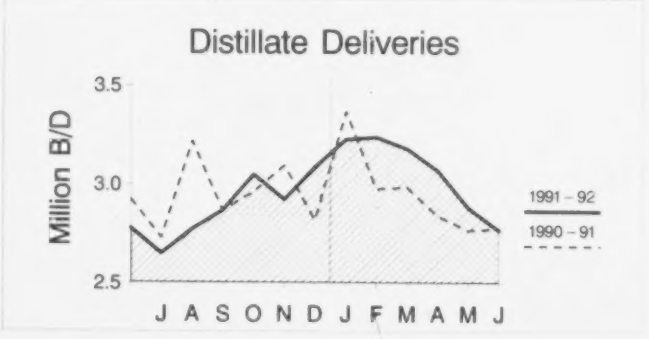
Distillates

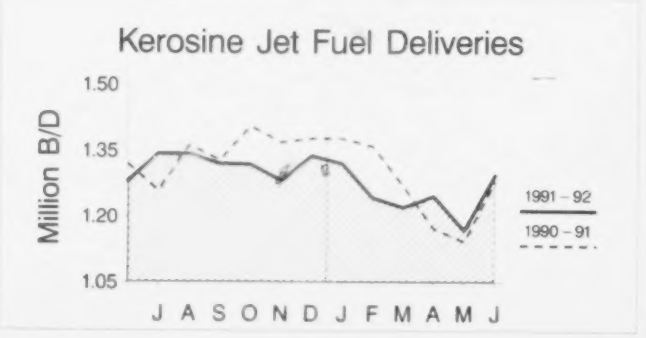
TRANSPORTATION DEMAND STILL GROWING. Increases in transportation demand fueled much of the 3.6 percent growth in distillate deliveries seen during the year's first half, although heating fuel demand, spurred by cooler temperatures this year than last, also contributed to overall growth. Despite falling fractionally year to year in June, deliveries were up 4 percent for the second quarter, building upon the 3.2 percent growth seen over the year's first three months. The increase over the April-June period was roughly in line with the growth suggested by underlying consumption indicators. However, despite the year-to-year increase, deliveries during the second quarter were off nearly 2 percent from the same period two years ago.

Led by growth in the on-highway sector, transportation distillate demand, by our estimates, continued to grow in June. Trucking industry data on ton-miles have continued to show year-to-year increases in recent months. Based on the recent trend, we estimate that highway diesel consumption (which makes up roughly 60 percent of summertime distillate deliveries) was up about 5 percent, or 90 thousand B/D, year to year, in June. Such an increase is comparable to what we have been estimating for the quarter as a whole. Rail demand, meanwhile, which had been growing at a similar rate in recent months, declined by an estimated 2-3 percent during June. The decline, however, resulted principally from a short-lived rail strike late in the month.









Kerosine Jet Fuel

DELIVERIES GROW WITH AIR TRAFFIC. Although down 1.2 percent, year to year, during the first half, jet fuel deliveries, in conjunction with increases in air travel, have been showing growth in more recent months. The second quarter's 3.2 percent year-to-year increase contrasted with the 4.4 percent decline seen during the first quarter. And while jet kerosine deliveries rose a more modest 1.2 percent in June, consumption indicators point to a recovery in deliveries, which if anything, has strengthened.

The jet fuel recovery actually dates back to May 1991; however, it wasn't until April of this year that the ground lost to the recession and the war had been retraced. Miles travelled by commercial airlines have continued to increase in the months since, and the steep air fare reductions offered by airlines during May translated into more robust growth in commercial air travel during June. Most major airlines reported significant upticks in passenger travel—particularly leisure travel.

Unlike the pattern of recent prior months, June's growth came on domestic as well as international routes. Other things equal, this would tend to have had a more direct impact on domestic jet fuel deliveries. However, with load factors down about 2 points from a year ago during April and May, air carriers were positioned to absorb many of the additional passengers by filling otherwise empty seats. In fact, some carriers were able to keep the number of additional flights to a minimum by filling planes at record rates during the month. Still, based on preliminary airline data, growth in miles travelled did pick up in June versus prior months. Averaging about 5 percent, year to year, over the first five months of the year, we estimate miles flown grew 6-8 percent, year to year, during June. Such growth would have brought traffic to an all-time high for the month.

That the rate of growth in jet fuel deliveries throughout the first half consistently trailed the rate of growth in miles flown is thought to have resulted, in part, from the fact that those airlines exiting the industry over the past 18 months tended to fly older, less fuel-efficient aircraft. Their absence likely boosted overall efficiency of the remaining fleet. Also contributing to the divergence has been the fact that traffic growth (even with June's increase in domestic travel) has been more pronounced on international routes, which are in some cases, refueled abroad.

Residual Fuel Oil

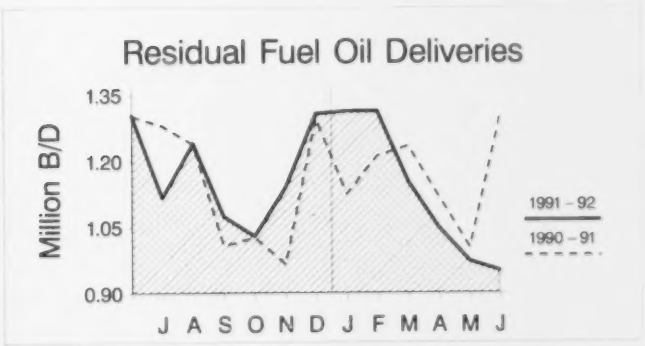
SECOND QUARTER AT 40-YEAR LOW. The first half's 3.5 percent drop in residual fuel deliveries hides the sharp contrast in growth between the first two quarters. After growing nearly 6 percent, year to year, during the first quarter, deliveries fell 13 percent during the second. The ominous-looking second quarter drop, however, while explainable in part by moderate weather and the resulting decline in power generation, is largely the result of above-trend deliveries in June a year ago. Adjusting for these factors, we estimate the underlying rate of decline in consumption to continue in the 5 to 10 percent range. Nonetheless, it is true that deliveries for the quarter as a whole fell below the million B/D mark for the first time in over 40 years.

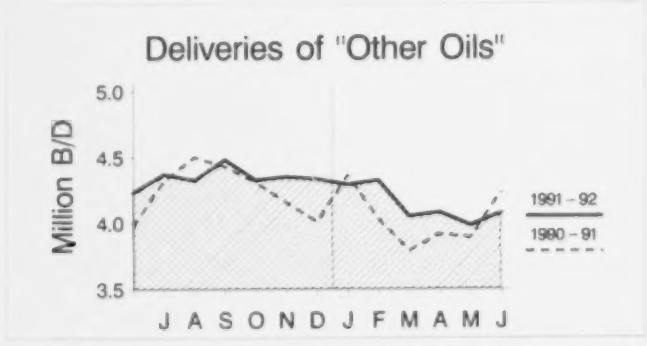
Thanks in part to moderate weather, power generation thus far in 1992 has been weak—down, year to year, in each of the first two quarters in those regions of country most reliant on residual fuel. Temperatures remained uncharacteristically cool throughout nearly every region of the country during June. As a result, there were year-to-year declines in electricity output of 7-8 percent in the East and 5-6 percent for the nation as a whole. Because resid-fired capacity often serves intermediate and peak generating needs, both its level and its share of all generation tend to rise and fall with demand. Thus, utility resid consumption is thought to have declined by more than the drop in electricity output during June — a decline exacerbated by more plentiful gas supplies from Canada this year.

In industrial markets, which account for about 12 percent of resid use, indicators of resid demand have been less bleak. The government reported that industrial output was up in May for the fourth consecutive month, with year-to-year increase put at 2.2 percent. And in bunker markets, which account for about a third of resid use, indicators of waterborne trade have remained relatively buoyant, although waterborne energy imports have fallen slightly in the most recent months.

Other Oils

FIRST-HALF GROWTH STRONGER THAN FOR TOTAL DELIVERIES. As has been the case for the past two years, first-half deliveries of "other oils" were stronger than deliveries as a





whole, rising 2.4 percent for the first six months. Deliveries of "other oils" had fallen by less than total deliveries in 1990 and actually rose nearly 2 percent last year despite another decline for total deliveries.

Much of the recent year-to-year increases for the "other oils" group have reflected recovery for individual products from earlier recession-related declines. Over a longer period, however, growth in petrochemical feedstocks has been the primary force behind demand growth for "other oils". We estimate, for example, that deliveries of the major petrochemical feedstocks have grown roughly 20 percent over the last five years. The remainder of the "other oils" category is estimated to have barely been flat over the same period.

SUPPLY [1/]

Production

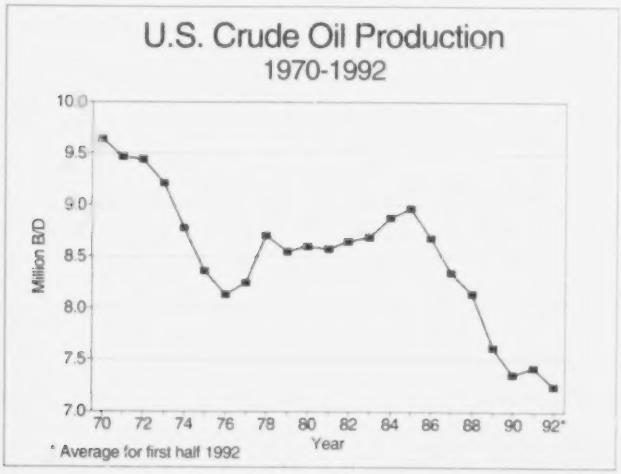
QUARTER-MILLION B/D DROPOFF DURING FIRST HALF.

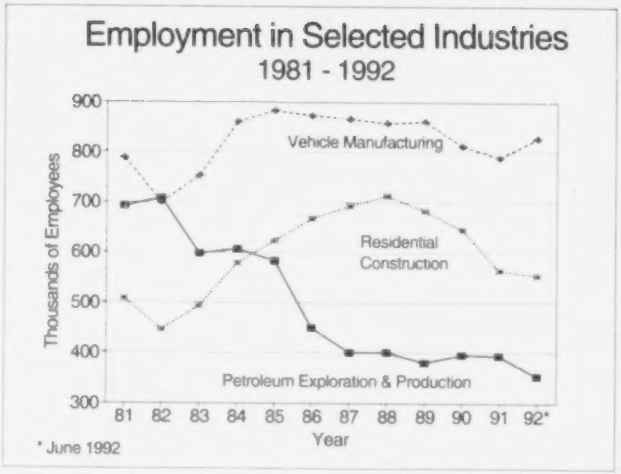
Domestic crude oil production in the first half of 1992 fell 3.3 percent or 250 thousand B/D percent versus a year ago, to 7.24 million B/D—the lowest half-year level since 1961. Declines in the lower 48 contributed two thirds of the drop.

Alaskan production, after a small increase last year, resumed the decline that has been taking place since its peak in 1987. In that year, production from Prudhoe Bay, which had begun producing ten years earlier, after discovery nearly ten years before that, began to drop. From its peak of 1.6 million B/D, and even with continued maintenance and facilities enhancements, Prudhoe Bay production has fallen nearly 20 percent.

Output from smaller fields which came on stream in more recent years have helped to make up part of the shortfall, but with Prudhoe alone accounting for roughly 70 percent of Alaskan production and roughly a sixth of all U.S. crude oil production, its decline has had a significant part in the decline of U.S. production overall. The next largest Alaskan field, Kuparuk, has accounted for about 300 thousand B/D compared with 1.3 million B/D from Prudhoe, while Endicott and others have been contributing about 200 thousand B/D.

With the decline in exploration and production activity over the past decade has come a substantial drop in upstream employment. According to Bureau of Labor Statistics figures, upstream employment has dropped by 400,000 jobs to only half its monthly peak of ten years ago. Mean[while] employment in vehicle manufacturing, for example, dropped about 70,000 from its monthly peak in late 1985. Versus ten years ago it has actually gained, on net, more than 100,000 jobs. In residential construction, though employment has dropped by roughly 200,000 since its monthly peak in 1988, compared against ten years ago the industry has experienced a net gain of more than 100,000 jobs. The accompanying graph compares the drop in oil industry upstream employment with selected other industries on an annual basis.





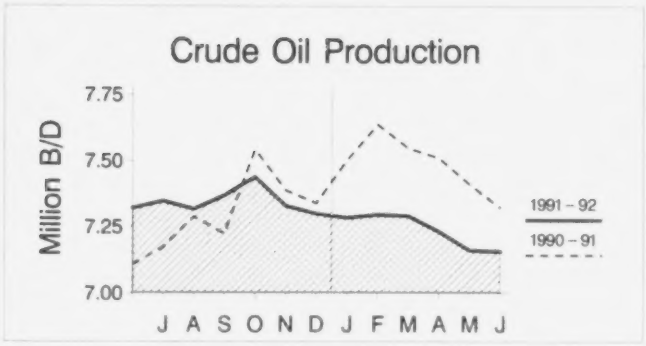
Imports

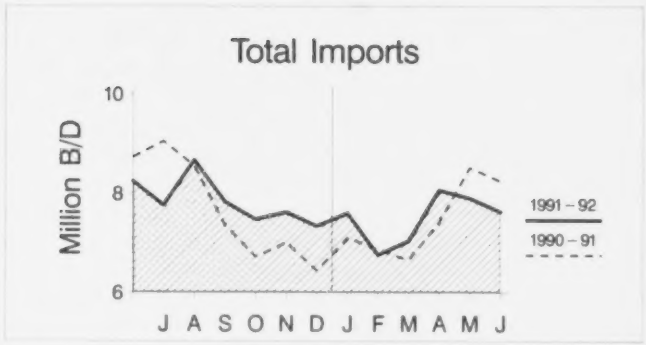
FIRST HALF FLAT BUT UNDERLYING DEPENDENCY GROWS.

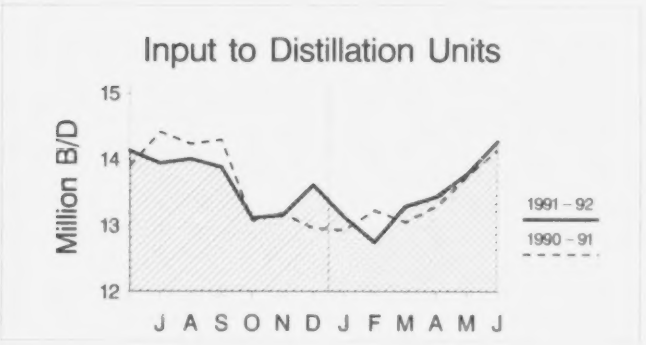
Total petroleum imports for the first half—despite the decline in domestic production and the increase in product deliveries— were nearly flat versus a year ago. The illusion of stable imports was possible in part because of an inventory build in the first half of last year that pushed imports up, coupled with a small drawdown in this year's first half. A dropoff in exports from higher than typical levels last year also helped to temporarily moderate the growth in imports. Total imports as a share of domestic deliveries amounted to 44.9 percent for the six-month period.

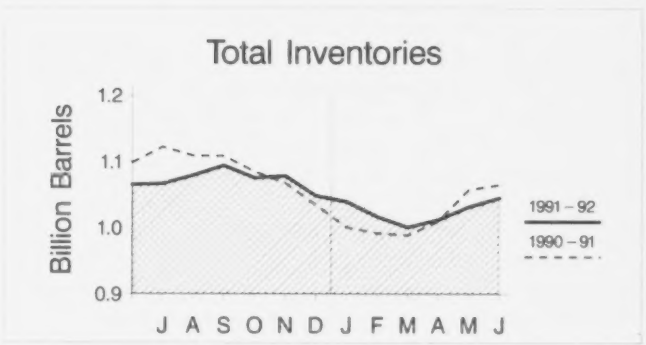
Crude oil imports, though nearly equal to year-ago levels for the half, dipped slightly in the past couple of months from 6.1 million B/D in April to less than 5.9 million B/D in June. Product imports, too, were nearly flat for the first half at 1.8 million B/D.

Gasoline imports have been relatively strong of late compared with earlier in the year, running over 400 thousand B/D in the past three months. This was still slightly below the even-stronger year-ago period, however. Distillate imports, which had dipped below 200 thousand B/D in May, rose in June to about 250 thousand B/D from 210 a year ago and were at the higher end of the range for monthly imports for the past two years. Resid imports, in the face of declining deliveries, reached a new recent-year low of 262 thousand B/D, only half the year-ago level.









Refinery Operations

UTILIZATION IN JUNE APPROACHES 10-YEAR HIGH.

Though for the first six months as a whole, input to distillation units managed only an 0.4 percent year-to-year increase, refinery activity was relatively strong during the second quarter. June's inputs, at nearly 14.3 million B/D, were at the highest level for any month in more than a year and a half, and the month's utilization of capacity in actual operation, at roughly 96 percent, was among the highest observed in the past ten years. On the basis of reported capacity, utilization for June worked out to 91.7 percent, up roughly 2 percentage points from a year ago.

Yields continued to favor distillate over gasoline production in June, as they have throughout the second quarter. Gasoline output for June was off 1.2 percent and distillate output, up 2.8 percent versus a year ago. Output of kerosine jet fuel dropped 3.1 percent for the month.

Inventories

CRUDE DRAWS, PRODUCTS BUILD IN JUNE.

Total stocks, which have been rising throughout the second quarter, rose another 14 million barrels during June to 1,046 million barrels. Though this brought the build for the second quarter to about 45 million barrels, inventories were still 20 million barrels below a year ago and 10 million barrels below average for the end of June.

With strong refinery runs and a slackening in crude oil imports, crude stocks fell 17 million barrels during the month to 328 million barrels—a level about 20 million barrels less than average for the month.

Gasoline stocks, after two months at the 216-217 million barrel level, rose 7 million barrels to 223 million barrels, 8 million barrels ahead of a year ago. Distillate stocks rose 9 million barrels for June, not much more than normal. At 103 million barrels, they were 10 million barrels lower than a year ago and continued to run slightly below average for this time of year.

1/ Total supply, i.e., production plus imports adjusted for net stock change is equal to total products supplied from primary storage. Total products supplied from primary storage less exports is equal to total domestic products supplied. Information contained in this report is derived from information published in the API Weekly Bulletin and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2/ Includes lease condensate.

3/ API data do not include crude oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR (according to the U.S. Department of Energy, the SPR held approximately 570 million barrels as of June 30, 1992).

ESTIMATED UNITED STATES PETROLEUM BALANCE
(Daily Average in Thousands of 42 Gallon barrels)

Products Supplied/Supply From Primary Storage	JUNE			YEAR-TO-DATE		
	1992[1]	1991[2]	% Change	1992[3R]	1991[2]	% Change
Products Supplied:						
Total motor gasoline	7,437	7,456	(0.3)	7,186	7,090	1.4
Finished leaded motor gasoline/*	126	272	(53.7)	128	273	(53.1)
Finished unleaded motor gasoline/*	7,311	7,184	1.8	7,058	6,817	3.5
Naphtha-jet	158	186	(15.1)	152	175	(13.1)
Kerosine-jet	1,295	1,280	1.2	1,249	1,266	(1.3)
Distillate fuel oil	2,766	2,775	(0.3)	3,059	2,952	3.6
Residual fuel oil	950	1,303	(27.1)	1,124	1,165	(3.5)
All other oils[4]	4,075	4,234	(3.8)	4,132	4,036	2.4
Reclassified[5]	-214	-356	(39.9)	-201	-242	(16.9)
Total domestic products supplied	16,467	16,878	(2.4)	16,701	16,442	1.6
Exports	925	921	0.4	958	1,062	(9.8)
Total products supplied	17,392	17,799	(2.3)	17,659	17,504	0.9
Supply:						
Domestic production:						
Crude oil[6]	7,155	7,320	(2.3)	7,236	7,485	(3.3)
Natural gas liquids	1,680	1,627	3.3	1,688	1,662	1.6
Other supply[7]	1,386	854	62.3	1,220	1,052	16.0
Total domestic supply	10,221	9,801	4.3	10,144	10,199	(0.5)
Imports:						
Crude oil, total[8]	5,876	6,334	(7.2)	5,714	5,696	0.3
Canadian	764	705	8.4	796	763	4.3
Other	5,112	5,629	(9.2)	4,918	4,933	(0.3)
Products, total	1,749	1,911	(8.5)	1,786	1,775	0.6
Residual fuel oil	262	512	(48.8)	363	415	(12.5)
Other	1,487	1,399	6.3	1,423	1,360	4.6
Total imports	7,625	8,245	(7.5)	7,500	7,471	0.4
Total supply	17,846	18,046	(1.1)	17,644	17,670	(0.1)
Stock change, all oils	454	247	******	-15	166	******
Refinery Operations						
Input to crude oil distillation units	14,272	14,128	1.0	13,444	13,394	0.4
Operable capacity	15,564	15,726	(1.0)	15,617	15,695	(0.5)
Refinery utilization (%)[9]	91.7	89.8	2.1	86.1	85.3	0.9
Crude oil runs	14,043	13,918	0.9	13,237	13,185	0.4

Stocks (millions bbls.)	1992		1991[2]	% Change from	
	June 30[10]	May 31[10]	June 30	Previous month	Year Ago
Crude oil[8]	328.2	345.6	346.8	(5.0)	(5.4)
Unfinished oils	103.9	104.4	111.0	(0.5)	(6.4)
Total motor gasoline/**	222.9	215.9	214.5	3.2	3.9
Finished leaded motor gasoline/*	3.8	3.8	7.4	0.0	(48.6)
Finished unleaded motor gasoline/*	181.4	176.2	169.6	3.0	7.0
Naphtha-jet	5.7	6.0	5.5	(5.0)	3.6
Kerosine-jet	39.5	39.0	42.9	1.3	(7.9)
Distillate fuel oil	103.4	94.3	113.7	9.7	(9.1)
Residual fuel oil	39.4	40.7	43.7	(3.2)	(9.8)
All other oils	202.6	186.1R	186.9	8.9	8.4
Total all oils	1,045.6	1,032.0R	1,065.0	1.3	(1.8)

/1 Based on API estimated data converted to a monthly basis.
/2 Source: U.S. Department of Energy.
/3 January-April, DOE, May-June, API.
/4 Includes crude losses.
/5 Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from the total domestic products supplied.
/6 API estimate; includes lease condensate.
/7 Includes Unaccounted-for crude oil, which will reflect withdrawls from the SPR when they occur, processing gain, field production of other hydrocarbons and alcohol.
/8 Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.
/9 Represents "Input to crude oil distillation units" as a percent of "Operable capacity".
/10 Derived by interpolating API weekly stocks data.
/R Revised.
/* Included in motor gasoline.
/** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.

ESTIMATED UNITED STATES PETROLEUM BALANCE
(Daily Average in Thousands of 42 Gallon barrels)

Products Supplied/Supply From Primary Storage	2ND QUARTER		
	1992[1]	1991[2]	%Change
Products Supplied:			
Total motor gasoline	7,357	7,344	0.2
Finished leaded motor gasoline/*	123	275	(55.3)
Finished unleaded motor gasoline/*	7,234	7,069	2.3
Naphtha-jet	153	178	(14.0)
Kerosine-jet	1,236	1,198	3.2
Distillate fuel oil	2,905	2,793	4.0
Residual fuel oil	990	1,140	(13.2)
All other oils[3]	4,045	4,011	0.8
Reclassified[4]	-170	-264	(35.6)
Total domestic products supplied	16,516	16,400	0.7
Exports	945	938	0.7
Total products supplied	17,461	17,338	0.7
Supply:			
Domestic production:			
Crude oil[5]	7,182	7,412	(3.1)
Natural gas liquids	1,684	1,650	2.1
Other supply[6]	1,211	1,045	15.9
Total domestic supply	10,077	10,107	(0.3)
Imports:			
Crude oil, total[7]	6,007	6,079	(1.2)
Canadian	777	742	4.7
Other	5,230	5,337	(2.0)
Products, total	1,858	1,987	(6.5)
Residual fuel oil	318	450	(29.3)
Other	1,540	1,537	0.2
Total imports	7,865	8,066	(2.5)
Total supply	17,942	18,173	(1.3)
Stock change, all oils	481	835	*****
Refinery Operations			
Input to crude oil distillation units	13,825	13,720	0.8
Operable capacity	15,603	15,711	(0.7)
Refinery utilization (%)[8]	88.6	87.3	1.5
Crude oil runs	13,637	13,500	1.0

Stocks (millions bbls.)	2ND QUARTER		
	1992[9]	1991[2]	%Change
Crude oil[7]	328.2	346.8	(5.4)
Unfinished oils	103.9	111.0	(6.4)
Total motor gasoline/**	222.9	214.5	3.9
Finished leaded motor gasoline/*	3.8	7.4	(48.6)
Finished unleaded motor gasoline/*	181.4	169.6	7.0
Naphtha-jet	5.7	5.5	3.6
Kerosine-jet	39.5	42.9	(7.9)
Distillate fuel oil	103.4	113.7	(9.1)
Residual fuel oil	39.4	43.7	(9.8)
All other oils	202.6	186.9	8.4
Total all oils	1,045.6	1,065.0	(1.8)

/1 Source: U.S. Department of Energy, April: May-June, API.
/2 Source: U.S. Department of Energy.
/3 Includes crude losses.
/4 Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from total domestic products supplied.
/5 API estimate; includes lease condensate.
/6 Includes Unaccounted-for crude oil, Processing gain and Field Production of other hydrocarbons and alcohol.
/7 Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.
/8 Represents "Input to crude oil distillation units" as a percent of "Operable capacity".
/9 Derived by interpolating API weekly stocks data.
/R Revised.
/* Included in motor gasoline.
/** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.

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